Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1-52.   (Canceled)

53.   (Newly Added) A method for handling a request for a network address allocation, the method comprising:

retrieving a host identifier from the request;

matching said host identifier with a list of host identifiers;

maintaining a state of authentication for a host associated with said host identifier if a match is found;

inserting a proxy address in a relay agent address field in the request;

transmitting said request to an address allocation device to issue or renew a host address if said host associated with said host identifier is in a state of authentication;

receiving a response from said address allocation device;

inserting said proxy address into a server identifier field in said response; and

transmitting said response to said host associated with said host identifier.

54.   (Newly Added) The method of claim 53, wherein said host identifier is a MAC address.

55.   (Newly Added) The method of claim 53, further comprising storing said list of host identifiers in a memory.

56. (Newly Added) The method of claim 53, further comprising pairing said list of host identifiers with a host information list.

57. (Newly Added) The method of claim 53, further comprising discarding the request if said host associated with said host identifier is not in a state of authentication.

58. (Newly Added) The method of claim 53, further comprising querying an accounting device to obtain account information for said host associated with said host identifier.

59. (Newly Added) The method of claim 53, wherein said inserting a proxy address in a relay agent address field further comprises flagging an option 82 option in the request.

60. (Newly Added) A method for handling a DHCP discovery packet, the method comprising:

retrieving a host identifier from the DHCP discovery packet;

matching said host identifier with a list of host identifiers;

maintaining a state of authentication for a host associated with said host identifier if a match is found;

inserting a proxy address in a gateway IP address (GIADDR) field in the DHCP discovery packet;

transmitting the DHCP discovery packet to an address allocation device to issue or renew a host address if said host associated with said host identifier is in a state of authentication;

receiving a DHCP offer packet from said address allocation device;

inserting said proxy address into a server identifier address (SIADDR) field in said DHCP

offer packet; and

transmitting said DHCP offer packet to said host associated with said host identifier.

61.   (Newly Added) The method of claim 60, wherein said host identifier is a MAC address.

62.   (Newly Added) The method of claim 60, further comprising storing said list of host

identifiers in a memory.

63.   (Newly Added) The method of claim 60, further comprising pairing said list of host

identifiers with a host information list.

64.   (Newly Added) The method of claim 60, further comprising discarding the DHCP

discovery packet if said host associated with said host identifier is not in a state of authentication.

65.   (Newly Added) The method of claim 60, further comprising querying an accounting

device to obtain account information for said host associated with said host identifier.

66.   (Newly Added) The method of claim 60, wherein said inserting a proxy address in a

gateway IP address (GIADDR) field further comprises flagging an option 82 option in the

request.

67.   (Newly Added) An apparatus for handling a request for a network address allocation, the

apparatus comprising:

a host identifier retrieving module configured to retrieve a host identifier from the

request;

a host identifier matching module coupled to said host identifier retrieving module and

configured to match said host identifier with a list of host identifiers;

a host state maintenance module coupled to said host identifier matching module and

configured to maintain a state of authentication for a host associated with said host identifier if a

match is found;

a relay agent address field proxy address insertion module configured to insert a proxy

address in a relay agent address field in the request;

a request transmission module coupled to said relay agent field proxy address insertion

module and configured to transmit said request to an address allocation device to issue or renew

a host address if said host associated with said host identifier is in a state of authentication;

an address allocation device response receiving module configured to receive a response

from said address allocation device;

a server identifier field proxy address insertion module coupled to said address allocation

device response receiving module and configured to insert said proxy address into a server

identifier field in said response; and

a response transmission module coupled to said server identifier field proxy address

insertion module and configured to transmit said response to said host associated with said host

identifier.

68.   (Newly Added) The apparatus of claim 67, wherein said host identifier is a MAC address.

69.   (Newly Added) The apparatus of claim 67, further comprising a memory configured to store said list of host identifiers.

70.   (Newly Added) The apparatus of claim 67, further comprising a host identifier list pairing module configured to pair said list of host identifiers with a host information list.

71.   (Newly Added) The apparatus of claim 67, further comprising a request discarding module configured to discard the request if said host associated with said host identifier is not in a state of authentication.

72.   (Newly Added) The apparatus of claim 67, further comprising an accounting device querying module configured to query an accounting device to obtain account information for said host associated with said host identifier.

73.   (Newly Added) The apparatus of claim 67, wherein said relay agent address field proxy address insertion module is further configured to flag an option 82 option in the request.

74.   (Newly Added) An apparatus for handling a DHCP discovery packet, the apparatus comprising:

a host identifier retrieving module configured to retrieve a host identifier from the DHCP discovery packet;

a host identifier matching module coupled to said host identifier retrieving module and configured to match said host identifier with a list of host identifiers;

a host state maintenance module coupled to said host identifier matching module and configured to maintain a state of authentication for a host associated with said host identifier if a match is found;

a GIADDR field proxy address insertion module configured to insert a proxy address in a gateway IP address (GIADDR) field in the DHCP discovery packet;

a DHCP discovery packet transmission module coupled to said GIADDR field proxy insertion module and configured to transmit the DHCP discovery packet to an address allocation device to issue or renew a host address if said host associated with said host identifier is in a state of authentication;

an address allocation device DCHP offer packet receiving module configured to receive a DHCP offer packet from said address allocation device;

an SIADDR field proxy address insertion module coupled to said address allocation device DHCP offer packet receiving module and configured to insert said proxy address into a server identifier address (SIADDR) field in said DHCP offer packet; and

a DHCP offer packet transmission module coupled to said SIADDR field proxy address insertion module and configured to transmit said DHCP offer packet to said host associated with said host identifier.

75.   (Newly Added) The apparatus of claim 74, wherein said host identifier is a MAC

address.

76.   (Newly Added) The apparatus of claim 74, further comprising a memory configured to

store said list of host identifiers.

77.   (Newly Added) The apparatus of claim 74, further comprising a host identifier list

pairing module configured to pair said list of host identifiers with a host information list.

78.   (Newly Added) The apparatus of claim 74, further comprising a request discarding

module configured to discard the request if said host associated with said host identifier is not in

a state of authentication.

79.   (Newly Added) The apparatus of claim 74, further comprising an accounting device

querying module configured to query an accounting device to obtain account information for said

host associated with said host identifier.

80.   (Newly Added) The apparatus of claim 74, wherein said relay agent address field proxy

address insertion module is further configured to flag an option 82 option in the request.

81.   (Newly Added) An apparatus for handling a request for a network address allocation, the

apparatus comprising:

        means for retrieving a host identifier from the request;

means for matching said host identifier with a list of host identifiers;

means for maintaining a state of authentication for a host associated with said host identifier if a match is found;

means for inserting a proxy address in a relay agent address field in the request;

means for transmitting said request to an address allocation device to issue or renew a host address if said host associated with said host identifier is in a state of authentication;

means for receiving a response from said address allocation device;

means for inserting said proxy address into a server identifier field in said response; and

means for transmitting said response to said host associated with said host identifier.

82. (Newly Added) The apparatus of claim 81, wherein said host identifier is a MAC address.

83. (Newly Added) The apparatus of claim 81, further comprising means for storing said list of host identifiers in a memory.

84. (Newly Added) The apparatus of claim 81, further comprising means for pairing said list of host identifiers with a host information list.

85. (Newly Added) The apparatus of claim 81, further comprising means for discarding the request if said host associated with said host identifier is not in a state of authentication.

86.   (Newly Added) The apparatus of claim 81, further comprising means for querying an

accounting device to obtain account information for said host associated with said host identifier.

87.   (Newly Added) The apparatus of claim 81, wherein said means for inserting a proxy

address in a relay agent address field further comprises means for flagging an option 82 option in

the request.

88.   (Newly Added) An apparatus for handling a DHCP discovery packet, the apparatus

comprising:

        means for retrieving a host identifier from the DHCP discovery packet;

        means for matching said host identifier with a list of host identifiers;

        means for maintaining a state of authentication for a host associated with said host

identifier if a match is found;

        means for inserting a proxy address in a gateway IP address (GIADDR) field in the

DHCP discovery packet;

        means for transmitting the DHCP discovery packet to an address allocation device to

issue or renew a host address if said host associated with said host identifier is in a state of

authentication;

        means for receiving a DHCP offer packet from said address allocation device;

        means for inserting said proxy address into a server identifier address (SIADDR) field in

said DHCP offer packet; and

        means for transmitting said DHCP offer packet to said host associated with said host

identifier.

89.   (Newly Added) The apparatus of claim 88, wherein said host identifier is a MAC address.

90.   (Newly Added) The apparatus of claim 88, further comprising means for storing said list of host identifiers in a memory.

91.   (Newly Added) The apparatus of claim 88, further comprising pairing said list of host identifiers with a host information list.

92.   (Newly Added) The apparatus of claim 88, further comprising means for discarding the DHCP discovery packet if said host associated with said host identifier is not in a state of authentication.

93.   (Newly Added) The apparatus of claim 88, further comprising means for querying an accounting device to obtain account information for said host associated with said host identifier.

94.   (Newly Added) The apparatus of claim 88, wherein said means for inserting a proxy address in a gateway IP address (GIADDR) field further comprises means for flagging an option 82 option in the request.